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ABSTRACT

In this module, developed by the Research Applications for Teaching (RAFT) project, preservice teachers study the major types of classroom interactions which occur between teachers and students and review the research findings showing how these interactions are related to effective teaching. Much effort is spent on describing procedures for developing questioning strategies, the most useful tool a teacher possesses for the development of students' understanding of concepts. Good attending and listening behaviors of teachers are also illustrated. Special interactions and procedural strategies for working with junior high age students are discussed in detail. The preservice teachers' learning experiences are centered around viewing videotapes of teachers with effective interaction techniques. They audiotape classroom interactions similarly to the way researchers do when they study the classroom behaviors of teachers. In simulation, each preservice teacher does an inductive-based presentation in cooperation with a peer group. This simulation is videotapes so that the listening, questioning, and attending skills of the presenter may be observed. (JD)

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DEVELOPING CLASSROOM INTERACTIONS WHICH SIGNAL EFFECTIVE TEACHING

A Module for Undergraduate Instruction in Teacher Education in the RAFT Program at Mississippi State University

Department of Curriculum and Instruction
College of Education
Mississippi State University

DEVELOPING CLASSROOM INTERACTIONS WHICH SIGNAL EFFECTIVE TEACHING

A Module for Undergraduate Instruction in Teacher Education

in the RAFT Program at Mississippi State University

by

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HOW TO USE THIS MODULE

In this module you will study the major types of classroom interactions which occur between teachers and students and will review the research findings showing how these interactions are related to effective teaching. Much effort is spent on describing procedures for developing questioning strategies, the most useful tool the teacher possesses for the development of students' understanding of concepts. Good attending and listening behaviors of teachers are also described. Special interactions and procedural strategies for working with junior high age students are discussed in some detail.

You will, in addition to lectures, have learning experiences centered around viewing videotapes of teachers with effective interaction techniques. You will audiotape classroom interactions in regular classes and classify the teacher-student exchanges similarly to the way researchers do when they study the classroom behavior of effective teachers. In a special simulation, each preservice teacher will do a presentation in corporation with a peer group. This simulation will be videotaped so that the listening, questioning and attending skills of the presenter may be observed by himself/herself and the peer group also.

A new and special feature of this teaching unit involves the development of a series of questions to be used by the teacher to explore the meaning of concepts at great depth with one or more students. This inductive method of concept discovery is similar to teaching strategies used by Socrates centuries ago. Such well-developed questioning strategies can encourage the development of high order thinking skills in students.

Lesson 1: Questioning

Objectives

The student will:

1. Write a question focusing one each of the six levels of Bloom's cognitive domain.
2. Describe what kind of thought activity is involved in each of Bloom's cognitive levels.
3. Explain the difference in form and function of convergent and divergent questions.
4. Describe what is meant by each of the following types of questions in Hilda Taba's strategies:
   A. Opening questions
   B. Lifting questions
   C. Supporting questions
5. Explain the difference in wait-time 1 and wait-time 2.
6. Describe the results of teacher's waiting longer for students to respond to questions.
7. Enumerate and discuss at least five uses of questions.

Assignment:

From your own subject area, write a question focusing on each of the six levels of Bloom's cognitive domain. You should have a total list of six questions.

QUESTIONING STRATEGIES

Introduction

Purpose

I. Involve students both physically and mentally in the Learning Process

- A. Questions for Stimulating Involvement
  - 1. Attention
  - 2. Motivation
- B. Questions for Data Gathering
- C. Questions for Discovery Processing
- D. Questions for Closure
- E. Questions for Evaluation
  - 1. Diagnostic
  - 2. Formative
  - 3. Summative

II. Question Classification

- A. Bloom's Taxonomy
- B. Convergent/Divergent
- C. Taba's Strategy

III. Wait Time

IV. Helpful Suggestions in Using Effective Questioning Strategies

Bloom's Questioning Strategy

One of the most popular systems used in classifying classroom questions is Bloom's Taxonomy. Six levels of cognitive thinking identified by Bloom are knowledge, comprehension, application, analysis, synthesis, and evaluation. These levels are sequential and provide the teacher with a framework in constructing questions that will encourage the student to engage in a specific level of thinking in responding. Each question is categorized according to the intended student response elicited by the question.

Level One: Knowledge (Memory)

The student is asked to recall information. Includes those behaviors and test situations which emphasize the remembering, either by recognition or recall of ideas, material, or phenomena.

Level Two: Comprehension

The student is asked to show understanding of the information. There are three types of comprehension behaviors: translation, interpretation, and extrapolation.

translation - an individual can put communication into another language, into other terms, or into another form of communication

interpretation - taking a configuration of ideas and rendering the ideas into a new configuration

extrapolation - making predictions based on understanding the trends, tendencies, or conditions described in the communication

Level Three: Application

The student is asked to use abstract ideas and apply them to a specific concrete situation. Distinction between comprehension and application is that "comprehension" shows that a student can use the abstraction when its use is specified. A demonstration of "application" shows that a student will use the abstraction correctly, given an appropriate situation in which no mode of solution is specified.

Level Four: Analysis

The student is asked to examine information by separating it into its parts. This requires an understanding of the content and the structural form of the material.

Level Five: Synthesis

The student is asked to engage in creative thinking or putting together parts to formulate a unique whole. Learning outcomes stress creative behaviors with major emphasis on the formulation of new structures.

Level Six: Evaluation

The student is asked to make a judgement. The ability to judge the value of material. They contain the elements of all the other categories, plus conscious value judgements based on clearly defined criteria.

Examples of Questions for Bloom's Taxonomy

Knowledge

1. What are the three parts of a leaf called?
2. Who discovered the cure for polio?
3. When was the neutron discovered?

Comprehension

1. In your own words, how would you describe the four developmental stages of a moth?
2. Explain how fish are able to breathe under water.
3. We have been involved in gathering data concerning the amount of time a candle continues to burn when a beaker is inverted and placed over it. We have used three or four beakers and found that under beaker one (100 ml) the candle continued to burn for 11 seconds, under beaker two (200 ml) the candle continued to burn for 22 seconds, and under beaker three (300 ml) it burned for 33 seconds. How long do you think it will burn under beaker four (400 ml)?

Application

1. How would you prepare an environment to grow cactus?
2. How would you use a balloon to demonstrate how our lungs work?
3. What would happen if you placed a fish in a covered container of cooled boiled water?

Analysis

1. What are some differences between a collie, huskie, and poodle? How are they alike?
2. Why is this plan to solve the problem a sound approach?

Synthesis

1. How would you improve the elevator?
2. What could you do to find out how much water the pail of snow would make?
3. How would you design an experiment to see if loud music had an effect on the growth of a plant?

Evaluation

1. What do you see as the best solution to the pollution problem?
2. Do you think there should be a law against legalized abortion?
3. What is the best way to demonstrate how clouds are formed?

Convergent and Divergent Questions

The convergent-divergent classification system is one of the simplest ways to identify question types. Convergent questions are called close-ended because they are those that have only a few responses. Divergent questions are referred to as open-ended questions because they elicit a wider range of responses. Carin and Sund (1985) recommended teachers to start with very convergent questions (especially in primary grades) and move toward more divergent ones later.

Convergent questions help to direct the learner's attention to specific objects or events. Through the use of convergent questions, the teacher may evaluate the students' observational and recall skills. The learner's mind is sharpened to using recall or memory skills. Convergent questions are necessary to lead children into higher skills or higher levels of learning.

Divergent questions have the capability of guiding children in discovering things for themselves, seeing interrelationships and making hypotheses to the outcome of observed data. Divergent questions not only broaden and deepen the student's responses and involve them in thinking creatively and critically, but they become better observers and organizers of the objects and events presented. Even a slight increase in the percentage of divergent questions yields a large increase in divergent thinking productivity by students. A larger number of students respond with deeper responses, which in turn stimulates further discussion among the children.

Construction of Convergent and Divergent Questions

Selection of particular words to begin questions often dictate the type of response.

Convergent questions usually begin with words such as:

1. Do
2. Did
3. Are
4. Is
5. Can
6. Will
7. Would
8. Should

Most of these questions require a yes or no response which elicits a close-ended response.

Divergent questions usually begin with words such as:

1. What
2. How
3. Why

Most of these questions elicit an open-ended response.

Just the choice of the first word in the question can generally elicit the desired response by the student. It is important to remember that questions are planned and constructed by the teacher for the purpose of a desired response. However, this is not a foolproof guarantee. Educators can only carefully plan to guide the students in their own learning process. The response by the students may be somewhat directed by the style of question proposed.

Taba's Questioning Strategy

Hilda Taba (1971) devised a questioning strategy that involves learners in a step-by-step process aimed at encouraging effective thinking.

Step One: The teacher uses an Opening Question that requires only low-level cognitive responses from the student. This allows the students to enter the discussion since an opening question should involve general knowledge but permit a wide range of responses. An effective Opening Question thus involves a lower cognitive response, such as Bloom's Knowledge or Comprehension level types and a more divergent question type that elicits a broad response.

Second Step: The teacher brings the student's thinking from the former lower level of knowledge to a higher level by searching for interrelationships in the data. Questions to aid in this strategy

are called Lifting Questions and are designed to encourage students to respond with tentative opinions rather than more qualified ones.

Third Step: Supporting Questions are used by the teacher which guides the student into thinking in more abstract terms. The learner is required to clarify, extend, and synthesize during this final stage.

The Taba strategy uses questions to direct the students' thinking step-by-step from low-level, specific concrete ideas toward more abstract, generalized concepts.

Wait-time

Wait-time is the time between a question asked and a response given. There are two types of wait-time. Wait-time 1 is the initial wait-time when an instructor waits for the first response. Wait-time 2 is the total time a teacher waits for a class to respond to the same question. Wait-time 2 may involve several minutes, particularly if the questions requires critical or creative thinking. Of the two, Mary Budd Rowe (1974) believes wait-time 2 is more important for a teacher to develop. She found a 500-700 percent increase in student responses when teachers used it. The responses from the poorer academic students furthermore increased significantly with longer wait-time 2s.

Teacher's untrained in questioning techniques discriminate against slower academic students. They wait only .9 seconds for the slow students to reply, but wait at least 1.2 seconds for the "top five" academically talented students to answer.

The quality of feedback from students is related to wait-time a teacher allows for response to a question. Rowe (1973) found that untrained teachers wait less than a second for wait-time 1.

If students are to inquire deeper into a subject, instructors need to increase their wait-time tolerance so the learners have more opportunity to think, create, and fully demonstrate their human potential.

Dr. Rowe found that teachers who waited three seconds or longer obtained greater speculation, conversation, and argument than those with shorter wait-times. She also found that when teachers are trained to wait more than three seconds on the average before responding, the following occurs:

1. The length of the student's response increases from 400-800 percent.
2. The number of unsolicited but appropriate responses increases.
3. Failure to respond decreases.
4. Confidence of children increases.
5. The number of questions asked by students increases.
6. Slow students contribute more. Increase is from 1.5 - 3.7 percent.
7. The variety of types of responses increases. There is more reacting to each other, structuring of procedures, and soliciting. Speculative thinking increases as much as 700 percent.
8. Discipline problems decrease.

Dr. Rowe also found that teachers trained to prolong wait-time changed in their classroom behavior as indicated below:

1. They exhibited more flexible types of responses.

2. The number and kinds of teacher questions changed.
3. Teacher expectations for student performance were modified. They were less likely to expect only the brighter students to reply and viewed their class as having fewer academically slower students.

(Information taken from Science Through Discovery, fifth edition, Chapter 6, Carin and Sund, 1984.)

The Important Use of the Question

The question is central to teaching and learning regardless of the level of instruction. The question should be a major premise to guide all professional teachers. Charles Degarmo (1911) stated that, "in the skillful use of the question more than in anything else lies the fine art of teaching; for in such use we have the guide to clear and vivid ideas, the quick spur to imagination, the stimulus to thought, the incentive to action." This statement is still a truth for today's educator. The question is central to teaching and learning. People rarely experience a new situation without asking questions.

With an increasing emphasis placed on teaching techniques that promote the involvement of students, questioning strategies have been included in many curriculum improvement programs of teacher education. The use of effective questioning techniques can serve many purposes in an educational environment.

Questions may be used to:

1. check on student comprehension,
2. assess what information students already possess concerning a new topic of study,

3. reinforce students' self-concept by allowing them to contribute to the discussion,
4. attempt to recapture the attention of a student who appears to have "tuned out" on the classroom activity,
5. redirect an ongoing discussion,
6. get feedback from students,
7. challenge students to evaluate sources of information, and
8. stimulate student thinking.

Many educational researchers agree that questions are the strongest tools a teacher has for teaching students to think.

Suggestions for Better Questioning Techniques

1. Prepare questions in advance.
2. Adapt questions to various skill levels.
3. Word questions so as to involve all of your students.
4. Encourage individuals to take time to answer.
5. Question students in a way that causes them to answer.
6. Emphasize the process of thinking rather than the answer.
7. Ask questions that teach students to compare and contrast.
8. Wait to give students time to think (wait-time).
9. As the question before you call a student's name so that every student will try to formulate an answer.
10. Begin with simple, fact questions.
11. Call on all types of students, not just eager volunteers.
12. If no answer is given, reword the question or include a hint.
13. Show acceptance for students' efforts, whether their answers are right or wrong. Give them encouragement.

14. Ask questions about attitudes and values as well as factual questions.

Activity: Developing Sequences of Questions to Probe Concepts at High Cognitive Level

Directions: Think of a concept which you wish to teach inductively by asking a series of probing questions. Identify the sub-objectives guiding the instructional sequence through this process. List the questions needed to develop the concept. These questions should begin with literal, concrete ones to secure trust. Then the questions should become more probing to encourage a thorough exploration of the concept. Then, summative questions should be asked to crystallize the concept and to insure its transfer to other situations.

On the following page entitled Example Questioning Strategy for Exploring Concepts, an example developed by a student in this class is given. Review this example. View the videotape again in which they established a model concept development strategy. Then, choose your own concept. Design a series of questions which will lead a student or small group of students to discover the meaning of the concept inductively and to apply this understanding to the understanding of other concepts.

EDS 3623
Inductive Teaching

Bill Lenington
January 28, 1987

Concept. Isolationism. The 20th century started out on a high note for the United States as Americans were optimistically looking forward to the new century. However, this optimism soon faded. World War I took American lives and the Great Depression caused a tremendous economic upheaval. These two events, along with others such as the reparation problems and Russian Revolution, were seen by many Americans as European problems. These feelings grew and intensified as the United States grew inward, focused attention on itself, and became isolated from the rest of the world.

Objectives

1. Students will list and describe the important events of the early 1900's.

2. Students will explain how the United States was affected by these events.

3. Students will describe the American reaction to the conditions of the early 1900s.

4. Students will explain the shift in the United States emphasis to itself and define isolationism in their own words.

5. Students will evaluate the policy of isolationism in terms of the early 1900's.

6. Students will evaluate the policy of isolationism as a possibility for today's United States foreign relations.

Questions

1. What were some of the important historical events that took place during the early 1900's?

2. Who can give me a quick summary of what (from #1) was? What happened? Who was involved? Who won? Where did this take place?

3. How was the United States affected by these events?

4. Since these events did have an impact on the United States, how might the American people react? How could we have faced these problems?

5. What could we call the policy of domestic emphasis?

6. What were some of the early things that the United States did to show the practice of isolationism?

7. Who can give me a quick review of some of the reasons why the United States resorted to isolationism?

8. Think about the events and conditions that we have discussed today. Was isolationism a good solution for the early 1900's? Why or why not?

9. Today the United States also has many problems to deal with. Some of these problems are even similar to the problems of the early 1900's. (Give examples.) Would a new form of isolationism be a good solution for today's problems? Why or why not?

Lesson 2: Attending Behaviors and Classroom Interactions

Objectives

At the end of this lesson, the student will:

1. Give specific examples of attending behaviors on the part of teachers.
2. Explain how teachers can improve their attending behaviors.
3. Describe the importance of nonverbal behavioral cues.
4. Give suggestions to a friend for improving his/her listening behaviors from guidelines suggested by research in this area.
5. Describe the types of positive and negative feedback given students by teachers.
6. Describe policies to be explained to junior high, elementary and senior high age students relative to their expectations of these students as teachers so far as classroom behavior is concerned.

Activity

Each student will present a concept, using an instructional time of approximately 10 minutes to a peer group team of five members. The presentation will be recorded. The team will review the tape. Both the presenter and members of the cooperating peer group will determine how the communication behavior of the teacher can be improved. Positive points observed will also be discussed.

ATTENDING AND LISTENING SKILLS

If teachers are to create an environment that is conducive to personal growth of students, they must model a set of interpersonal communication skills that facilitate teacher-student interaction. Interpersonal communication skills must be defined as a series of specific verbal and nonverbal behaviors that stimulate personal inquiry between two or more persons--inquiry that leads to greater self-knowledge. In the academe, of course, the communication is between teachers and students; and students and students. Interpersonal communication skills include attending behavior and active listening. When these skills are practiced effectively by teachers, students will be encouraged to express their thoughts and feelings.

Attending Behavior

Nonverbal Cues Delivered by Teachers

Eye contact. The teacher should focus his/her eyes directly on the speaker but be sensitive to the effect such eye-to-eye contact can have. If the speaker appears uncomfortable with direct eye contact, effective teachers readjust their focus accordingly.

Facial expressions. Teachers' expressions or lack of them provide feedback to the speaker, thereby prompting him/her to say more. Facial expressions should communicate a spirit of empathy. Smiles, frowns, expressions of surprise or disappointment are not very expensive. Effective teachers share them. Too much expression, however, may be distracting, especially if the expression is negative. Teachers need

to be aware of their facial expressions and the effect they have on the speaker.

Body posture. The student is helped to relax by teachers' relaxing their own body. Body gestures also communicate meaning. How will students feel when the teacher points a finger at them and stands rigid with arms folded across the chest? Mehrabian (1969) noted that an arms akimbo position most often occurs in conversations with disliked persons. In contrast, when the listener leans toward or touches the speaker, a high level of interest and involvement is communicated.

Physical space. The distance people create between themselves has an inherent communication value. Hall (1966) described an 18-inch distance between two individuals as "intimate space," the 18-inch to 4-foot distance as "personal space," the 4-foot to 12-foot distance as "social distance" and between 12-feet as "public distance." Each of these distances create distinctly different nonverbal messages--from those of intimacy or emotional closeness where physical touching is possible to the space where fine communication habits are imperceptible. The effective teacher finds a comfortable space between himself/herself and the students. A space is honored which communicates the message, "I want to make closer contact with you." Effective teachers walk toward the students and do not place physical as well as psychological obstacles in the communication pathway. They do not hide behind desks or place furniture between themselves and students.

Verbal Attending Cues

Teachers also use verbal cues to indicate attending behaviors to students. The idea is to keep students talking and involved. The less talking the teachers do and the more talking students do, the more student involvement is observed. Better achievement and personal adjustment results from more student involvement.

1. Silence. When used appropriately, silence can be golden. It can give both the teacher and the student a chance to stop and reflect on what has been said. It may also encourage the student to say more if he or she doesn't have to anticipate an instant response. Too often students feel compelled to make an immediate response and, consequently, they begin searching for a reply before the speaker has concluded. Wait a few seconds to be sure that the speaker has completed his/her thoughts.

2. Brief Verbal Acknowledgements. Silence can also be deadly to communications sometimes. The teacher may do well to interject brief verbal acknowledgements. Keep the reactions brief and quickly refocus on the student. Such interjections may be: "I see;" Wow;" Oh, That's too bad." The goal is to avoid interjecting personal comments which may interrupt the flow of ideas.

3. Subsummaries. When appropriate, the teacher summarizes the essence of what the student has said in a sentence or two. By feeding back to the student the gist of his or her message, you validate the communication, and this often inspires further conversation.

Listening Behaviors of Teachers

Krishnamurti, an Indian philosopher, said that Americans do not truly listen. They are always judging, composing their thoughts, or preparing salvos for reacting during the time the speaker is discoursing. A person who truly listens in an open, accepting, nonjudgemental way is probably a rarity.

Demonstrating poor listening skills is related to how teachers perceive their roles. If teachers see themselves primarily as those who help students develop or achieve some subject matter concept or principle, they will naturally focus on its achievement. If teachers, however, see themselves as those who help students to develop, they will tend to focus on the student as a subject first and on the content second. Listen intently to what children have to say, and when they have finished, and only then, formulate questions and responses to help them make discoveries and use their thought processes.

Active listening involves the following components:

1. Blocking out external stimuli.
2. Attending carefully to both the verbal and nonverbal messages of the student.
3. Differentiating between the intellectual and emotional content of a message.
4. Tend to emotional matters before intellectual content is considered.

Suggestions for Good Listening Techniques:

1. Focus on the person and what he or she is saying. Maintain eye contact with the speaker. Try not to evaluate what the speaker is

saying until he or she has completed all statements.

2. Do not take the discussion away from the students. They are the ones who need to develop their minds.
3. Give nonverbal signals to show you are concerned and that you are listening.
4. Develop silent time. Wait after a student apparently has finished speaking before you reply. This time is like wait-time 2. Silent time prevents the teacher's cutting off a student's statement and allows for others to interject their ideas without interference. Calm silence also helps to indicate to a student and the class a trust in their abilities to think and to make significant statements.
5. Look for indicators that students may want to say something, for example:
   a. Raising their arms.
   b. Rising up in their seats.
   c. Eye contact with the teacher.
   d. Glancing at the teacher or the speaker with a meaningful expression.
   e. Pressing their lips together like they are going to say something.
   f. Mumbling. When these signs occur, invite participation, for example, "John, is there something you would like to say?"
6. Do not interrupt even for clarification reasons until you are certain the student has completed his/her message.

TEACHER FEEDBACK

The quality of teacher feedback to a student's answer or comment relative to a question is perhaps the best motivating tool in the teacher's instructional kit of methods. There are ten types of teacher feedback:

1. The teacher makes no attempt to acknowledge the student's comment.
2. The teacher responds with a "yes" or "no."
3. The teacher responds "yes," followed by restating the student's answer or responds by restating the question.
4. The teacher responds with an acknowledgement and then proceeds to give a prompt, hint or cue to help the student expand the response (e.g., "Yes, but what about the leaves on the Magnolia?" or "No, it starts with an 's'.")
5. The teacher acknowledges the student and then adds a statement of praise about the response (e.g., "That's right. Good.")
6. The teacher asks for clarification. It could be to clarify who is speaking or to clarify exactly what was said (e.g., "Who said lava?" or "Speak up.") Asking for clarification of meaning is a powerful tool.
7. The teacher gives the answer to his or her own question.
8. The teacher responds with a critical comment (e.g., "That's not being very smart.")
9. The teacher elaborates on a particular response made by a student. This expansion adds a lot more information or

explanation in depth to a particular point without covering new material. The use of the student's name in a positive reference during this discussion is a big plus.

TYPES OF CLASSROOM TALK

Flanders in describing effective classroom interactions between teachers and students identified three types of talk which take place (Flanders, 1970). He described teacher talk where the teacher was either giving information to students or asking them questions. Student talk to teachers described situations where the students answered queries of teachers or volunteered information. Student talk to students described items in which one student reacted to a remark made by another on the topic being discussed. Another student might chime in and the student to student discussion continue for some time. This latter interaction pattern describes a situation where high motivation for learning results. This type of student-to-student talk signals a very mature learning condition. To achieve this type of interaction is a goal for teachers for it is one of the very best indicators of effective teaching.

Assignment 2: Coding Teacher-Student Interactions

Directions: Each student will attend a regular class in session in the public schools. He/she will audiotape a thirty-minute segment of a lesson where teacher-student interchanges are taking place. Ten entire exchanges between student and teacher will be mapped out according to the following criteria for ten sequences; i.e., 10 interchanges will be studied. The interchanges will be reported in a chart as shown in Figure 1.

Classify each interchange according to these criteria:

1. Response Opportunities

   Discipline Questions
   Direct Questions
   Open Questions
   Call Outs

2. Level of Question

   Knowledge
   Comprehension
   Application
   Analysis
   Synthesis
   Evaluation

3. Student's Answer

   Correct Answer
   Part-Correct Answer
   Incorrect Answer
   No Response

4. Teacher's Feedback Reaction

   Praise
   Affirmation of Correct Response
   No Feedback Reaction
   Negation of Incorrect Answers
   Criticism
   Process Feedback
   Gives Answer

4. Continued Teacher Feedback

   Asks Other
   Call Out
   Repeats Question
   Rephrase or Clue
   New Question

Report Form for Teacher-Student Exchange

Directions: Please use the concepts outlined under Assignment 2 Direction Sheet to describe the nature of the teacher-student interchanges observed in the classroom. Describe the response opportunity, level of question, student answer and teacher feedback reaction for each of 10 separate interchanges observed. Then, compute the percentage of each separate event occurring during the total observation session for the teacher-student interchanges.

Response Opportunities	Student Answer
Exchange 1_____	Ex. 1_____
Exchange 2_____	Ex. 2_____
Exchange 3_____	Ex. 3_____
Exchange 4_____	Ex. 4_____
Exchange 5_____	Ex. 5_____
Exchange 6_____	Ex. 6_____
Exchange 7_____	Ex. 7_____
Exchange 8_____	Ex. 8_____
Exchange 9_____	Ex. 9_____
Exchange 10_____	Ex. 10_____
Level of Questions	Teacher Feedback
Ex. 1_____	Ex. 1_____
Ex. 2_____	Ex. 2_____
....	
Ex. 10_____	
	Ex. 10_____

EXPECTATIONS AND PROCEDURES FOR JUNIOR HIGH SCHOOL CLASSROOMS

Procedures for Beginning Class

Administrative matters. The teacher needs procedures to handle reporting absences and tardiness. Students need to know what behaviors are expected of them while the teacher is completing administrative procedures. Some teachers begin the period with a brief warm-up activity such as a few problems or a brief assignment. Others expect the students to sit quietly and wait for the teacher to complete the routine.

Student behavior before and at beginning of period. Procedures should be established for what students are expected to do when the tardy bell rings (be in seats, stop talking), behavior during PA announcements (no talking, no interruptions of the teacher), what materials are expected to be brought to class each day, and how materials that are to be used during the period will be distributed. Procedures during whole-class instructional activities should be stated.

Student talk. Many teachers require that students raise their hands in order to receive permission to speak. Sometimes teachers allow chorus responses (everybody answers at once) without hand raising, but the teacher then needs to identify and use some signal to students which lets them know when such responding is appropriate.

Use of room by students. Students should know when it is appropriate to use the pencil sharpener, to obtain materials from shelves or bookcases, and if, and when, it is appropriate to leave their seats to seek help from the teacher or other students. Unclear

expectations in this area result in some students spending time wandering around the room.

Leaving the room. Some procedure needs to be established for allowing students to use the bathroom, go to the library or school office. Usually the school will have some specified system. We have noted that teachers who are free when hall passes frequently have large numbers of requests to leave the room.

Signals for attention. Frequently, teachers use a verbal sign or a cue such as moving to a specific area of the room, ringing a bell, or turning on an overhead projector to signal to students. Such a signal, if used consistently, can be an effective device for making a transition between activities or for obtaining student attention.

Student behavior during seatwork. Expectations need to be established for what kind of talk, if any, may occur during seatwork, how students can get help, when out of seat behavior is or is not permitted, access to materials, and what to do if seatwork assignments are completed early.

Procedures for laboratory work or individual projects. A system for distributing materials when these are used is essential. Also, safety routines or rules are vital. Expectations regarding appropriate behavior should be established for students working individually or in groups, and when extensive movement around the room or coming and going is required. Finally, routines for cleaning up are suggested.

Expectations Regarding Student Responsibility for Work

Policy regarding the form of work. Procedures can be established for how students are to place headings on paper, for the use of pen or

pencil, for writing on one side or both sides of the paper, and for neatness.

Policy regarding completion of assignments. The teacher will have to decide on whether incomplete or late work is acceptable, and under what conditions, and whether a penalty will be imposed. In addition, some procedure for informing students of due dates for assignments should be established, along with procedures for make-up work for students who are absent.

Communicating assignments to students. An effective procedure for communicating assignments is to keep a list of each period's work assignments during a 2- or 3-week period of time. Posting this list allows students who were absent to easily identify necessary make-up work. Another useful procedure is to record the assignment for the day on an overhead projector transparency or on a specific place on the chalkboard, and require the students to copy the assignment into their notebooks.

Checking procedures. Work that is to be checked by students in class can save the teacher time and provide quick feedback to students. Procedures should be established for exchanging papers, how errors are to be noted, and how papers are to be returned and passed to the teacher.

Grading policy. Students should know what components will be included in determining report card grades and the weight, or percent of each component.

Other Procedures

Student use of teacher desk or storage areas. Generally these are

kept off limits to students, except when the teacher gives special permission.

Fire and disaster drills. Students should be informed early in the year about what they are to do during such emergencies. Typically, the school will have a master plan and will conduct schoolwide drills.

Procedures for ending of class. Expectations regarding straightening up the room, returning to seats, noise level, and a signal for dismissal may be established. When cleanup requires more than a few seconds, teachers usually set aside the necessary time at the end of the period to complete the task before the bell rings.

Interruptions. Students need to know what is expected during interruptions (continue working or sit quietly).

Note. This material is adapted from Table 3 of the manual, Organizing and Managing the Junior High School Classroom, E. T. Emmer, Carolyn M. Evertson, Barbara S. Clements, J. P. Sanford, and Murray E. Worsham, Austin, Texas: The Research and Development Center for Teacher Education, The University of Texas at Austin, August 1981.

Test Item Pool

Following are a collection of essay-type test items that have been used in the evaluation of students' academic progress relative to understanding and applying concepts of effective classroom interaction.

1. Explain how procedures for giving praise are different for young children, or special children, and older youth.
2. Explain the meaning of extrapolation learning within the comprehension level of the cognitive domain in learning concepts.
3. Design two questions in your field of expertise for each of the six levels of Bloom's taxonomy of the cognitive domain.
4. Distinguish between inductive and deductive type of questions and explain the function of each.
5. Construct three convergent and three divergent questions that are appropriate for asking at a specific grade level.
6. Describe Taba's questioning strategy and illustrate it with a specific questioning sequence.
7. Explain the rationale for the effectiveness of using appropriate wait-time in questioning students.
8. Describe the advantages for increasing wait-time.
9. Describe at least five functions of questions.
10. While asking questions, how can teachers emphasize the processes of thinking, rather than the importance of answers to specific questions?
11. In the developing sequences of questions to probe the meaning of a concept, what is the role of opening literal questions, lifting questions and supporting questions.

12. View the videotape of Esther Howard's teaching performance with kindergarten children. Give specific examples of the following concepts observed:

    A. Her attending behavior.

    B. Her feedback behavior.

    C. The quality of her questions.

    D. Her nonverbal communication skills.

13. Devise a unique or creative way to communicate your teacher expectations to a group of junior high age students, relative to their expected classroom behavior.

14. Identify the specific level of the cognitive domain for which information is elicited in the first 15 questions on this list.

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